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| APPLICATION NO.           | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---------------------------|-------------|----------------------|---------------------|------------------|
| 10/807,903                | 03/23/2004  | William D. Llewellyn | TRIPP040            | 3994             |
| 22434                     | 7590        | 08/24/2005           | EXAMINER            |                  |
| BEYER WEAVER & THOMAS LLP |             |                      | NGUYEN, KHANH V     |                  |
| P.O. BOX 70250            |             |                      | ART UNIT            |                  |
| OAKLAND, CA 94612-0250    |             |                      | PAPER NUMBER        |                  |
|                           |             |                      | 2817                |                  |

DATE MAILED: 08/24/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

|                              |                               |                                       |  |
|------------------------------|-------------------------------|---------------------------------------|--|
| <b>Office Action Summary</b> | Application No.<br>10/807,903 | Applicant(s)<br>LLEWELLYN, WILLIAM D. |  |
|                              | Examiner<br>Khanh V. Nguyen   | Art Unit<br>2817                      |  |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 March 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-22 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-8 and 10-22 is/are rejected.
- 7) ☒ Claim(s) 9 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/15/04</u> . | 6) <input type="checkbox"/> Other: _____  |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-22 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The DETAIL DESCRIPTION of the invention failed to specify which signal called first, second and third offset cancellation signals. "calibration mode" and "normal operation mode" are not descriptive to allow one of ordinary make and/or use the invention.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

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The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Claims 1-8, 10-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Llewellyn (6,724,248).

Regarding claims 1, 19-22, Llewellyn (Fig. 3) discloses a DC offset calibration comprising: an offset cancellation circuitry (250) can be read as a DC offset cancellation logic having SAR engine (252) operable in calibration mode (CAL) to generate first and second offset cancellation signals (note two arrows coming out of SAR engine (252)) corresponding supply rails (172, 174), and during a normal operation mode generate a third offset cancellation via DAC (158).

Regarding claim 2, wherein the amplifier if reference circuit is comprised one of a switching amplifier and a linear amplifier, see col. 13, lines 26-35.

Regarding claim 3, wherein the reference circuit employs feedback paths via resistors (R13, R14) which is continuous.

Regarding claim 4, wherein the reference circuit comprises one of a single ended amplifier and a differential amplifier.

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Regarding claim 5, wherein the reference circuit comprises multi channels via (Y, YB), each of the channels comprising an instance of the offset cancellation logic.

Regarding claim 6, wherein the cancellation logic is capable of generating the third offset cancellation signal during the calibration mode.

Regarding claim 7, wherein the reference circuit comprises a switching differential amplifier (172, 174) and a differential output (OUTP, OUTN).

Regarding claim 8, wherein the offset cancellation logic is operable to generate the first offset cancellation signal when the first and second outputs are coupled to the first voltage, and the second offset cancellation signal when the first and second outputs are coupled to the second voltage.

Regarding claim 10, wherein the reference can be optimized for operation in a desired frequency range.

Regarding claim 11, wherein the type of frequency range depends on intended use of the invention, wherein the reference circuit uses analog audio signal, see column 3, lines 33-36.

Regarding claim 12, wherein signal processing unit (116) can be read as a processor stage having its output coupled to further circuits which can be read as a power stage.

Regarding claims 13-18, wherein the processor can be claimed computer or as claimed, see column 14, lines 7-39.

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***Allowable Subject Matter***

Claim 9 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claim 9 calls for, among others, first and second up/down counters.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Khanh V. Nguyen whose telephone number is (571) 272-1767. The examiner can normally be reached from 8:00 AM - 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Pascal can be reached on (571) 272-1769. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 872-9306 for After Final communications.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**KHANH V. NGUYEN  
PRIMARY EXAMINER**